

Abstract

In accordance with a first embodiment of the invention, there is provided a method of operating a digital system that has a processor and a memory. A plurality of program tasks is executed on the processor (800). The processor requests access to memory in response to executing the tasks (802). Some of these access requests are not directly or not straightforwardly linked with the current program counter (PC); for example, a write transaction going through a write buffer (808). An access error resulting from this type of transaction error is referred to as an imprecise abort. A task-id value is supplied along with the address during a deferred memory access and corresponds to the task-id of the task that initiated the memory access (802). If an error condition that prevents normal completion of the memory transaction is detected (806), then a recovery routine uses the task-id value provided with the memory transaction request to identify which program task requested the transaction (810, 812). The recovery routine can then resolve the problem or kill the identified task.

TOP SECRET